
XIII. *The Natural History of Xylocopa Teredo and Horia maculata.* By the Rev. Lansdown Guilding, B.A. F.L.S.

Read June 4, 1822.

INSECTS, though seemingly the most insignificant of animal beings, have an important task assigned them by our great and good Creator. Though the period of their activity and existence is soon closed, and their size appears contemptible, nothing can long resist their attacks. Their utility is equal to their power. In innumerable instances they conduce to the comforts and pleasures of the human race; but it is chiefly, perhaps, as scavengers that they are serviceable in the boundless field of nature. Without the labours of these puny agents the atmosphere would abound in effluvia fatal to life. Without their aid, the low and lovely plants that adorn our valleys, the stately tenants of our forests, with all their parasites, would want room for development. If man be sometimes a miserable sufferer from the united or unrestrained attacks of these active invaders of his rights, he cannot, on reflection, but confess, that they are wisely and kindly given for the general welfare of the universe. The decomposition of timber hastening to decay, is accelerated by no insect, perhaps, more than by the Bee, which is the subject of this communication. Independent of its singular habits, the striking difference of the sexes will, I doubt not, render the species worthy of the notice of the Linnean Society. The description of its destructive parasite has been added to make its history complete.

St. Vincent, Jan. 1, 1822.

HYMEN-

HYMENOPTERA. *Linn.* PIEZATA. *Fabr.*

APIDÆ.

XYLOCOPA. *Latr.* APIS. *Linn.*

XYLOCOPA TEREDO.

Femina. TAB. VIII. Fig. 1.

X. tota hirsuta aterrima, alis æneo-purpurascentibus latis.

An *Xylocopa morio*, *Fab. Syst. Piezat.*, p. 338. 2?

DESC. *Caput* magnum, depressum. *Mandibulæ* validissimæ.

Alæ nonnunquam atro-purpurascentes, margine exteriori atomis sparsis ornato. *Abdomen* latum, lateribus hirsutissimis. *Pedes* validi, hirsutissimi.

Habitat in Americæ æquinoctialis insularumque oppositarum truncis exsiccatis, quos perforat, longitudinaliter excavat, ibique plures nidos (sæpenumero vix separatos at nunquam, quod mirum, confusos) singulos annulis ligneis mirâ arte confectis distinctos, a fundo incipiens polline herbarum melle mixto replet; et unicuique ovum concredit.

Horiâ maculatâ infestantur familiæ quam obviam sæpe crudeliter trucidat apis parens. Die stridore magno flores petit mellisuga. Nidos amissos quos odor gratissimus monstrat sedule quærit. Capite adempto diu vacillat vitæ tenax.

Ovum maximum, molle, hyalino-pallidum, curvum, extremitate hac illâ majore.

LARVA (*tab. viii. fig. 2. et 3.*) apus, nuda, lactea, caput versus attenuata:

attenuata. *Caput* parvum, ochraceum, mandibulis rufescentibus. *Corpus* segmentorum tredecim, spiraculis ochraceis. Animal, dum pascit, scybala fusca filamentosa concatenata ex ano protrudit.

PUPA junior ochracea : *thorax* antice spinulis duabus obtusis : *anus* mucrone lato apice acuminato.

Mas? TAB. VIII. Fig. 5.

Flavo-rufescens hirta, subtus nigricans, capite parvo.

Apis Brasilianorum, *Linn. Syst. Nat.* ii. 961. 49.

DESC. *Antennæ* subtus flavæ. *Alæ* pallidæ pterigostiis ferrugineis, margine externo atomis ornato.

Habitat semper cum præcedente (sine dubio mas, nam semper inermis) in labyrinthis feminâ excavatis. Copulâ junctos sexus nunquam observavimus.

TEMPUS. Per totum annum occurrit imago. Larva pupaque mensibus Feb. Oct.

Mores Generis *Xylocopæ* (*Abeilles perce-bois*) accuratissime descripsit celeberrimus Reaumur. *Tom.* vi. p. 39.

COLEOPTERA.

CANTHARIDÆ.

HORIA. *Fab., Oliv.*

HORIA MACULATA.

TAB. VIII. Fig. 6.

H. flavescens, elytris maculis septem nigris. *Fabr. Ent. Syst.* i. 2. p. 90. *Syst. Eleuth.* ii. p. 85.

Horia maculata. *Oliv. Ins.* iii. 53. bis. *tab.* 1. *fig.* 1.

Cucujus maculatus. *Swed. Act. Holm.* 1787.

Mus. Britan., Dom. MacLeay, nostr.

DESC. *Corpus* totum flavum; mandibulis, antennis, oculis, pedibusque (excepto femorum basi) atris. *Alæ* flavo-rufescentes, apice nigrificantes. *Elytra* maculis septem atris 2. 2. 2. 1. anticis nonnunquam cohærentibus, ultimâ terminali.

Var. β. *Corpus* pallidius maculis elytrorum utrinque septem distinctis minoribus.

Long. corp. 1 un. 4 lin.

Habitat in Americâ æquinoctiali.

LARVA (TAB. VIII. Fig. 2. g.) hexapus, pallidè ochracea, nuda, nitida, ore nigrificante.

PUPA (Fig. 2. h.) nitida, oblonga, flavescens, lineâ dorsali ochracea; oculis, mandibulis, membrisque saturationibus.

Nidis *Xylocopæ Teredinis* nutritur. Forsan dum larva cibum apibus præparatum avidè consumit, hospes fame perit. Mox matura proprium nidum (Fig. 2. i.) excavat? introitum claudit (k.), ac metamorphosin subit.

TEMPUS. Imago mensibus Jun., Jul., Dec., Feb. Larva pupaque Martio et Feb. mihi obviæ.

